west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
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Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.wvdep.org

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Permit No.:	R13-2290M
Plant ID No.:	099-00007
Applicant:	Department of Veterans Affairs (VA) Medical Center
Facility Name:	Huntington VA Medical Center
Location:	Wayne County
SIC Code:	62211 - General Medical and Surgical Hospitals
Application Type:	Modification
Received Date:	September 15, 2016
Engineer Assigned:	John Legg
Fee Amount:	$2,000.00
Date Paid:	September 16, 2016
Applicant Ad Date:	February 22 , 2017
Newspaper:	Herald Dispatch (Huntington, WV)
Complete-By Date:	June 2, 2017 (Affidavit of Publication arrived 3/2/17 at DAQ)
UTM's:	Easting: 367.44 km Northing: 4,248.49 km Zone: 17
Lat/Longs:	Latitude: 38.384 N Longitude: -82.517 W
Description:	Installation of a new Caterpillar Olympian, Model G150LG6, 150 kW/230.3 bhp, natural gas-fired emergency generator at newly acquired property adjoining the Medical Center. The hours of operation will be limited to 500 hr/yr.

SUMMARY

The VA Medical Center proposes to install a new Caterpillar Olympian, Model G150LG6, 150 kW/230.3 bhp natural gas-fired emergency generator to provide electricity to the facility when purchased power is not available.

Based on operating the new generator engine 500 hr/yr, estimated emissions after controls (catalytic muffler) are: nitrogen oxides (NO_x) at 0.29 lb/hr and 0.07 ton/yr; carbon monoxide (CO) at 0.66 lb/hr and 0.16 ton/yr; and VOC (THC) at 0.01 lb/hr and 0.002 ton/yr.

PROCESS DESCRIPTION

The VA Medical Center operates twelve (12) permitted diesel oil-fueled emergency generators of various design capacities (134 bhp to 1322 bhp) and installation dates (1996 through 2015). The new natural gas-fired emergency generator is the first natural gas-fired emergency generator to be permitted.

Table 1: Permitted Emergency Generator Engines located at the VA Medical Center, Huntington, Wayne County, WV.

Emission Unit ID	Emergency Generator Description		Permitted Under	Year Installed	Design Capacity	Control Device
E-Gen 25 (1)	Uncertified	275 kW, Cummins	R13-2290B	1996	435 bhp	None
E-Gen 23R (1)	Uncertified	440 kW, Caterpillar	R13-2290B	1995	???	None
E-Gen 3a (1)	Uncertified	80 kW, John Deere	R13-2290B	1998	150 bhp	None
E-Gen 3b (1)	Uncertified	125 kW, Onan	R13-2290E	2001	207 bhp	None
E-Gen 2 (1)	Uncertified	125 kW, Onan	R13-2290F	2006	207 bhp	None
E-Gen 1S (1)	Certified	900 kW, Onan	R13-2290H	2009	1,322 bhp	None
E-Gen Mobile (1)	Certified	400 kW, Cummins	R13-2290I	2011	755 bhp	None
E-Gen 5 (1)	Certified	350 kW, Caterpillar	R13-2290I	2011	546 bhp	None
E-Gen 16 (1)	Certified	100 kW, Caterpillar	R13-2290J	2014	134 bhp	None
E-Gen Mobile 2 (1)	Certified	100 kW, Cummins	R13-2290K	2014	324 bhp	None
E-Gen Mobile 3 (1)	Certified	150 kW, Cummins	R13-2290K	2014	324 bhp	None
E-Gen 52 (1)	Certified	600 kW, Caterpillar	R13-2290L	2015	900 bhp	None
E-Gen BRAC (2)	**Certified**	**150kW, Caterpillar**	**R13-2290M**	**2017**	**230.3 bhp**	**None**

(1) Diesel-fueled engine.
(2) Natural Gas-fired engine.

Table 2: Information on New Natural Gas-fired Generator Engine to be Located at the VA Medical Center, Huntington, WV.

Emergency Generator Engine (E-Gen BRAC; BRAC)	
Emission Unit ID No.	E-Gen BRAC
Emission Point ID No.	BRAC

Table 2: Information on New Natural Gas-fired Generator Engine to be Located at the VA Medical Center, Huntington, WV.

Emergency Generator Engine (E-Gen BRAC; BRAC)	
Manufacturer	Caterpillar
Model	G150LG6
Model Year	2015
Manufacturer's Rated bhp/rpm	230.3/1800
Date Installation	2017
Engine Manufactured	2015
Source Status	New Source
Is this a Certified Stationary Spark Ignition Engine according to 40 CFR 60 Subpart JJJJ?	Yes
Engine Type	Lean Burn Four Stroke (LB4S)
APCD Type	Catalytic Muffler
Fuel Type	PQ (Pipeline Quality Natural Gas)
Displacement	
Fuel Consumption	1726.1 ft3/hr @ 100%
Operation	500 hr/yr

SITE INSPECTION

DAQ Enforcement Inspector Mike Rowe last inspected the facility on June 18, 2015. At that time the facility was found to be in compliance and was given the inspection code 30.

Directions to the VA Medical Center as given in application:

From Huntington, WV - Rt. 60 W to Carson Street. Left on Carson St. To Spring Valley Dr. Turn right and proceed to VA entrance.

ESTIMATE OF EMISSIONS

Emission rates for the new natural gas-fueled emergency generator engine were calculated using emission factors provided by Olympian and are based on operating the generator a maximum

of 500 hr/yr. In addition to providing electricity when purchased power is unavailable, the generator will be operated for the purpose of maintenance checks and readiness testing.

Table 3:		**Hourly and Annual Emissions from the VA Medical Center's New Natural Gas-fired, Emergency Generator to be located at Huntington, WV.**			
Pollutant		**Maximum Emissions (Controlled - Catalytic Muffler)**			
		Caterpillar G150LG6, 150 kW/230.3 bhp Emergency Generator Set			
		(g/hp-hr) [1]	**(lb/hr)**	**(ton/yr) [2]**	**(ton/yr) [3]**
Criteria Pollutants	Nitrogen Oxides (NO_x)	0.57	0.29	0.07	1.29
	Carbon Monoxide (CO)	1.3	0.66	0.16	2.95
	Total Hydrocarbon (THC)	0.02	0.01	0.002	0.045
(1) Estimated using Olympian's "2015 EPA Spark-Ignited Exhaust Emission Data."					
(2) Annual Based on 500 hr/yr of operation.					
(3) Annual Based on 8,760 hr/yr of operation.					

Per the requirements of 40 CFR 60, Subpart JJJJ [40 CFR§60.4233(e)], the permittee shall comply with the emission standards in Table 1 of the subpart for the new engine. Note that the emission rates provide in the application after controls (catalytic muffler) are more restrictive than the requirements of Subpart JJJJ.

Table 4:		**Hourly and Annual Emission Requirements Based on 40 CFR 60, Subpart JJJJ [40 CFR§60.4233(e) for the VA Medical Center's New Natural Gas-fired, Emergency Generator to be located at Huntington, WV.**			
Pollutant		**Maximum Emission Rate**			
		Caterpillar G150LG6, 150 kW/230.3 bhp Emergency Generator Set			
		(g/hp-hr) [1]	**(lb/hr)**	**(ton/yr) [2]**	**(ton/yr) [3]**
Criteria Pollutants	Nitrogen Oxides (NO_x)	2.0	1.02	0.25	4.47
	Carbon Monoxide (CO)	4.0	2.03	0.51	8.89
	Volatile Organic Compounds (VOC)	1.0	0.51	0.13	2.23

Table 4:	Hourly and Annual Emission Requirements Based on 40 CFR 60, Subpart JJJJ [40 CFR§60.4233(e) for the VA Medical Center's New Natural Gas-fired, Emergency Generator to be located at Huntington, WV.			
Pollutant	Maximum Emission Rate			
	Caterpillar G150LG6, 150 kW/230.3 bhp Emergency Generator Set			
	(g/hp-hr) [1]	(lb/hr)	(ton/yr) [2]	(ton/yr) [3]

(1) Emission requirements from Table 1 of 40 CFR60, Subpart JJJJ.
(2) Annual Based on 500 hr/yr of operation.
(3) Annual Based on 8,760 hr/yr of operation.

REGULATORY APPLICABILITY

After this modification (R13-2290M), the VA Medical Center will remain a non-major, stationary source under Rule 13, a deferred Title V source and an area source for Hazardous Air Pollutants (HAPs).

The following State and Federal Rules were examined for applicability:

45CSR13 - "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation."

The VA Medical Center is an existing stationary source that already has a Rule 13 permit (R13-2290L).

The installation of the new emergency generator is considered to be a modification because the generator engine is subject to NSPS Subpart JJJJ.

The VA Medical Center submitted an application (on September 15, 2016), paid a $2,000 application fee (on September 16, 2016) to modify their current permit, ran a legal advertisement (on February 22, 2017), and provided proof of publication that the legal advertisement ran in the form of a legal affidavit received by the DAQ (on March 2, 2017) at which time the application was deemed complete.

45CSR16 "Standards of Performance for New Stationary Sources"

Adopts by reference the standards of performance for new stationary sources promulgated by the United States Environmental Protection Agency pursuant

to section 111(b) of the federal Clean Air Act, as amended (CAA). This rule codifies general procedures and criteria to implement the standards of performance for new stationary sources set forth in 40 CFR Part 60. The rule also adopts associated reference methods, performance specifications and other test methods which are appended to these standards.

40 CFR 60, Subpart JJJJ applies to the new natural gas-fired engine. See below.

40CSR30 - "Requirements for Operating Permits."

The facility is considered to be a deferred non-major Title V. The replacement emergency generator has no affect on Title V applicability.

45CSR34- "Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40 CFR, Part 63"

This rule establishes and adopts a program of national emission standards for hazardous air pollutants (NESHAPS) and other regulatory requirements promulgated by the United States Environmental Protection Agency pursuant to 40 CFR Parts 61, 63 and section 112 of the federal Clean Air Act, as amended (CAA). This rule codifies general procedures and criteria to implement emission standards for stationary sources that emit (or have the potential to emit) one or more of the eight substances listed as hazardous air pollutants in 40 CFR §61.01(a), or one or more of the substances listed as hazardous air pollutants in section 112(b) of the CAA. The Secretary hereby adopts these standards by reference. The Secretary also adopts associated reference methods, performance specifications and other test methods which are appended to these standards.

40 CFR 63, Subpart ZZZZ was review for applicability. See below.

40 CFR 60 Subpart JJJJ, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines."

On January 18, 2008 the USEPA issued the NSPS for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE). This rule outlines standards of performance for stationary spark ignition (SI) internal combustion engines (ICE). The rule segments applicability primarily by whether the applicant is an engine manufacturer, or an owner/operator.

The VA Medical Center is subject to Subpart JJJJ because the new emergency generator engine is a stationary SI ICE that commenced construction after June 12, 2006, and were manufactured after January 1, 2009 and has a maximum engine power greater than 25 hp.

The generator engine is USEPA Certified for the engine manufacturer/Caterpillar Olympian and as such is not required to perform an initial performance test. The unit will be operated as an emergency generator and will be limited to 100 hours per year for operation during maintenance checks and readiness testing and non-emergency situations (limited to 50 hours out of the 100 hours). Additionally, the permittee will be required to operate and maintain the engine per the manufacturer's maintenance and emission-related written instructions.

Table 5: U.S. EPA 2015 Model Year Certificate of Conformity with CAA.

Natural Gas-fired Generator Set	Engine Manufacturer/ Certificate Issued to:	Engine Family	Certificate Number
Caterpillar/Olympian G150LG Natural Gas Generator, 230.3 bhp, 150 kW, 187 kVA, 120/208 volt, three phase, 60 Hz with a 400 amp and 100 amp, 4 pole, Bypass Automatic Transfer Switches in NEMA Enclosures	Generac Power Systems, Inc.	FGNXB08.92C4	FGNXB08.92C4-054

40CFR63, Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combust Engines"

Subpart ZZZZ establishes national emission limitations and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions. The subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

The VA Medical Center is classified as an area source of HAP emissions (individual HAP with potential emissions less than or equal to 10 ton/yr; aggregated HAP with potential emissions less than or equal to 25 ton/yr) and will remain so after this modification.

The internal combustion engine for the emergency generator set is classified as an affected source under 40 CFR 63 Subpart ZZZZ. §§63.6590 (c) and (c)(1) state that for engines located at an area source of HAPs, if the source meets the requirements of Subpart JJJJ, that no requirements of Subpart

ZZZZ apply to the engine. Thus, the proposed engine is not subject to any requirements of this subpart.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

The combustion of natural gas in the new emergency generator results in the formation very small amounts of Hazardous Air Pollutants (HAP). The new engine will not emit any pollutants that are not already being emitted by other sources at the facility.

AIR QUALITY IMPACT ANALYSIS

The proposed modification is not classified as a major source as defined by 45CSR14 (PSD). For this reason no air quality modeling was required.

MONITORING OF OPERATIONS

60 CFR 60 Subpart JJJJ sets specific monitoring and record-keeping requirements for this limited use/emergency generator engine:

- Documenting the purpose for operating the engine and
- Performing regular, routine maintenance.

No additional monitoring was deemed necessary.

CHANGES MADE TO OLD PERMIT (R13-2290L)

A compare file comparing version M of the permit to version L of the permit is attached to this evaluation in Attachment 1.

RECOMMENDATION TO DIRECTOR

The VA Medical Center's request to add/construct one (1) new 150 kW/230.3 bhp natural gas-fired emergency generator to its Huntington, Wayne County, WV facility meets the requirements of 45CSR13 (Rule 13) and all other applicable rules, and therefore should be granted a Rule 13 modification permit (R13-2290M).

John Legg
Permit Writer

May 05, 2017 5/5/17
Date

ATTACHMENT 1

File Comparison

Comparing R13-2290M to R13-2290L

Department of Veterans Affairs

VA Medical Center - Huntington, WV

(099-00007)

West Virginia Department of Environmental Protection

~~*Earl Ray Tomblin*~~
Jim Justice
Governor

Division of Air Quality

~~*Randy C. Huffman*~~
Austin Caperton
Cabinet Secretary

Permit to Modify

R13-~~2290L~~2290M

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:
Department of Veterans Affairs
VA Medical Center -Huntington
099-00007

William F. Durham
Director

Issued: ~~July 27, 2015~~Draft

This permit supersedes and replaces previously issued Permit R13-~~2290K~~2290L.

Facility Location:	1540 Spring Valley Drive Huntington, Wayne County, West Virginia 25704
Mailing Address:	Same as above
Facility Description:	Medical Treatment Facility
NAICS Codes:	622210 – General Medical and Surgical Hospitals
UTM Coordinates:	367.44 km Easting • 4,244.85 km Northing • Zone 17
Permit Type:	Modification
Description of Change:	~~Replace an old (installed in 1987), diesel fueled, 600~~Add a new, natural gas-fired, Caterpillar Olympian, Model No. G150G6, 150 kW/230.3 bhp emergency generator ~~with a new diesel fueled, 600 kW emergency generator~~set.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

As a result of this permit, the source is a nonmajor or area source subject to 45CSR30. Therefore, the facility is not subject to the permitting requirements of 45CSR30 and is classified as a deferred source.

Table of Contents

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Boiler 1	1E	400 bhp duel fuel boiler Mfg. Johnston	1989	16.74 MMBtu/hr	None
Boiler 2	1E	350 bhp duel fuel boiler Mfg. Kewanee Model H3S-350-G02-LE	1999	14.65 MMBtu/hr	Lo-NOx Burners
Boiler 3	1E	300 bhp duel fuel Boiler Mfg. Kewanee Model H3S-300-G02-LE	1999	12.56 MMBtu/hr	Lo-NOx Burners
Boiler 4	1E	350 bhp duel fuel boiler Mfg. Cleaver Brooks Model 4WI-200-350-200	2008	14.29 MMBtu/hr	None
E-Gen 25		275 kW Generator Set Mfg. Cummins Model NT855-G6 Location: Bldg. 25 – Parking Garage	1996	435 bhp	None
E-Gen 23R		440 kW Generator Set Mfg. Caterpillar Model 3412 Location Bldg. 23R – Research Center	1995	bhp	None
E-Gen 3a		80 kW Generator Set Mfg. John Deere Model 6059T Location: Bldg. #3 - Boiler Plant	1998	150 bhp	None
E-Gen 3b		125 kW Generator Set Mfg. Onan Model 125DGEA Location: Bldg. #3 - Boiler Plant	2001	207 bhp	None
E-Gen 2		125 kW Generator Set Mfg. Onan/Cummins Model Generator 125DGDK Model Engine 6BTA5.9-G3 Location: Bldg. #2 - Boiler Plant	2006	207 bhp	None
E-Gen1S		900 kW Generator Set Mfg. Onan/Cummings Model 900 DQFAC Engine Family No. 9CEXL030.AAD Certificate No. CEX-NRCI-09-36 Location: Bldg. #1S	2009	1,322 bhp	None
E-Gen Mobile		400 kW Generator Set Mfg. Cummins Generator Model 400 DFEH Engine Model QSX15-G9 NR 2 Engine Family No. BCEXL015.AAJ Certificate No. CEX-STATCI-11-07 Location: Bldg.	2011	755 bhp	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
E-Gen 5		350 kW Generator Set Mfg. Caterpillar Engine Family No. ACPXL15.2ESX Certificate No. CPX-NRCI-10-30	2011	546 bhp	None
E-Gen 16		100kW Generator Set Mfg. Caterpillar/Perkins Engine Co. Engine Family No. DPKXL04.4NJ1 Certificate No. DPKXL04.4NJ1-005 Location: Bldg. #16	2014	134bhp	None
E-Gen Mobile 2		100kW Generator Set Mfg. Cummins Model No. 100DSGAA Engine Family No. ECEXL0409AAD Certificate No. ECEXL0409AAD-007 Location: T1 Modular IRM	2014	324 bhp	None
E-Gen Mobile 3		150kW Generator Set Mfg. Cummins Model No. 150DSGAC Engine Family No. ECEXL0409AAD Certificate No. ECEXL0409AAD-007 Location: Bldg.#6,7,8	2014	324 bhp	None
E-Gen 52		600 kW Generator Set Mfg. Caterpillar Model No. C18 ATAAC Engine Family No. FCPXL18.1NYS Certificate No. FCPXL18.1NYS-003 Location: Bldg. 52	2015	900 bhp	None
E-Gen BRAC	BRAC	Natural Gas-fired 150 kW Generator Set Caterpillar Olympian Model No. G150LG6	2017	230.3 bhp	Catalytic Muffler

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
dscm	Dry Standard Cubic Meter
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
M	Thousand
MACT	Maximum Achievable Control Technology
MDHI	Maximum Design Heat Input
MM	Million
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter less than 2.5 µm in diameter
PM_{10}	Particulate Matter less than 10µm in diameter
Ppb	Pounds per Batch
Pph	Pounds per Hour
Ppm	Parts per Million
Ppmv or ppmv	Parts per Million by Volume
PSD	Prevention of Significant Deterioration
Psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds
VOL	Volatile Organic Liquids

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.4. Term and Renewal

2.4.1. This permit supersedes and replaces previously issued Permit R13-~~2290K~~2290L. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2290, R13-2290A, R13-2290B, R13-2290C, R13-2290D, R13-2290E, R13-2290F, R13-2290G, R13-2290H, R13-2290I, R13-2290J, R13-2290K, R13-2290L, R13-2290M and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by

improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly

authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

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3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es)), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

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~~If to the~~ DAQ: Director WVDEP Division of Air Quality 601 57th Street Charleston, WV 25304-2345	**~~If to the~~ US EPA:** Associate Director Office of Air Enforcement and Compliance Assistance (3AP20) U.S. Environmental Protection Agency Region III 1650 Arch Street Philadelphia, PA 19103-2029
DAQ Compliance and Enforcement[1]: DEPAirQualityReports@wv.gov	

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. Operating Fee

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. The following conditions and requirements are specific to Boilers 1, 2, 3, and 4:

a. The boilers shall be fired with pipeline quality natural gas at all times except when conducting periodic testing, and readiness checks of the boiler's ability to fire on liquid fuel (diesel); during periods of natural gas curtailment; or gas supply emergencies. The duration of such periodic testing and/or readiness check shall not exceed more than 48 hours per year for each boiler.

b. CO emissions from emission point 1E shall not exceed an amount as calculated using the following equation.

$$EL_{CO} = \left(0.073\ \frac{lb}{MMBtu} \times \sum HI_{gas}\right) + \left(0.037\ \frac{lb}{MMBtu} \times \sum HI_{diesel}\right)$$

Where:

EL_{CO} = Emission Limit for CO, in terms of lb per hour.
HI_{gas} = Actual Heat Input from natural gas firing, in terms of MMBtu/hr
HI_{diesel} = Actual Heat Input from diesel firing, in terms of MMBtu/hr

c. NO_x emissions from emission point 1E shall not exceed an amount as calculated using the following equation.

$$EL_{NOx} = \left(0.047\ \frac{lb}{MMBtu} \times \sum HI_{gas}\right) + \left(0.19\ \frac{lb}{MMBtu} \times \sum HI_{diesel}\right)$$

Where:

EL_{NOx} = Emission Limit for NO_x in terms of lb per hour.
HI_{gas} = Heat Input from natural gas firing, in terms of MMBtu/hr
HI_{diesel} = Heat Input from diesel firing, in terms of MMBtu/hr

d. At all times when the boilers are operated solely with pipeline quality natural gas, the use of natural gas in these emission units satisfies compliance with the limitations of 45CSR§2-3.1., 45CSR§2-4.1.b., and 45CSR§10-3.1.e.
[45CSR§2A-3.1.a., 45CSR§10-10.3., and 45CSR§10A-3.1.b.]

e. At all times when any of the affected emission units are operated on diesel or any combination of diesel and natural gas, Emission Point 1E shall not exhibit visible emissions greater than 10% opacity on a six minute block average. Compliance shall be verified in accordance with Condition 4.2.2. of this permit.
[45CSR§2-3.1.]

f. Each boiler shall be designed or constructed with a maximum design heat input not to exceed the design capacity listed in Table 1.0 of this permit. Compliance with this limit shall be satisfied by limiting annual total heat input from all boilers to 510,182 MMBtu, measured as a rolling 12 month total.

4.1.2. The following conditions and requirements are specific to generator sets E-Gen 1S, EG-Gen Mobile, E-Gen 5, E-Gen 16, E-Gen Mobile 2, E-Gen Mobile 3, E-Gen 52:

a. Maximum Yearly Operation Limitation. The maximum yearly hours of operation for each of the emergency generator sets listed above shall not exceed 500 hours per year. For each generator set/engine, compliance with the Maximum Yearly Operation Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the hours of operation at any given time during the previous twelve consecutive calendar months.

b. The permittee shall maintain the engine of each generator set according to the manufacturer's emission-related written instructions.
[40 CFR §60.4211(a)(1)]

c. The permittee shall only change those emission-related settings of the generator sets that are permitted by the manufacturer.
[40 CFR §60.4211(a)(2)]

d. Each generator set shall be equipped with an engine or engine configuration that has been certified by the manufacturer to comply with either 40 CFR §60.4205(b)(2), which referred to 40 CFR §§89.111 and 112 or 40 CFR Part 60.
[40 CFR §§60.4211(a)(3) and (c)(1)]

e. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
[40 CFR §60.4211(f)]

f. The maximum name plate power output of the engine for each generator set shall not be greater than listed in Table 1.0 of this permit.

g. Each engine will be equipped with a non-resettable hour meter.

4.1.3. Emissions from Emission Unit E-Gen 25 (Cummins Model NT855-G6 Generator Set) shall not exceed the maximum hourly and annual emission rates specified below:

Table 4.1.3. Emission Limits for E-Gen 25

Pollutant	Maximum Emission Rates	
	(lb/hr)	(tons/yr)
NO_x	11.50	2.87
CO	0.74	0.18

4.1.4. Emission from Emission Unit E-Gen 23R (Caterpillar Model 3412 Generator Set) shall not exceed the maximum hourly and annual emission rates specified below:

Table 4.1.4. Emission Limits for E-Gen 23R

Pollutant	Maximum Emission Rates	
	(lb/hr)	(tons/yr)
NO_x	11.97	2.99
CO	2.58	0.64

4.1.5. Emissions from Emission Unit E-Gen 3a (John Deere Model 6059T Generator Set) shall not exceed the maximum hourly and annual emission rates specified below:

Table 4.1.5. Emission Limits for E-Gen 3a

Pollutant	Maximum Emission Rates	
	(lb/hr)	(tons/yr)
NO_x	3.86	0.89
CO	0.88	0.22

4.1.6. Emissions from Emission Unit E-Gen 3b (Onan Model 125DGEA Generator Set) shall not exceed the maximum hourly and annual emission rates specified below:

Table 4.1.6. Emission Limits for E-Gen 3b

Pollutant	Maximum Emission Rates	
	(lb/hr)	(tons/yr)
NO_x	2.99	0.75
CO	0.39	0.10

4.1.7. Emissions from Emission Unit E-Gen 2 (Onan/Cummins Model 125DGDK Generator Set) shall not exceed the maximum hourly and annual emission rates specified below:

Table 4.1.7. Emission Limits for E-Gen 2

Pollutant	Maximum Emission Rates	
	(lb/hr)	(tons/yr)
NO_x	2.5	0.63
CO	0.66	0.17

4.1.8. Diesel fuel used by the boilers and engines for the generator sets shall have a maximum sulfur content no greater than 15 ppm (ultra-low sulfur diesel) and with either a minimum centane index of 40 or a maximum aromatic content of 35 volume percent. Diesel meeting the specifications of Nonroad diesel under 40 CFR §80.510(b) is equivalent.
[40 CFR §§60.42c(d), 40 CSR §10-3.3.f., 40 CFR §60.4207(b)]

4.1.9. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

4.2.1. For each month, the permittee shall record the amount of fuel by type (natural gas and diesel) consumed by the boilers and shall calculate the rolling 12 month total of combined heat input from all boilers for each month. Such records shall be maintained in accordance with Condition 3.4.1. of this permit.
[40CFR§60.48c(g)(2), 45 CSR §2-8.3.c., and 45CSR§2A-7.1.a.1.]

4.2.2. When any boiler covered by this permit is operated on any amount of fuel oil (diesel) for more than 30 consecutive operating days, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping of the corresponding emission point of the associated boiler that is subject to the visible emission standard of Condition 4.1.1.(d). after the 30th consecutive operating day and no later than the 45 consecutive day. Once the boiler is switched back to 100% natural gas, the counting of 30 consecutive operating days shall be reset to zero and not begin counting again until the unit begins to consume fuel oil (diesel) again.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40 CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once every forty-five (45) days when the boiler is being fired with fuel oil. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for three (3) consecutive checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of METHOD 9 as soon a practicable, but within seventy-two (72) hours of the final visual emission check. A METHOD 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

4.2.3. For the purpose of demonstrating compliance with periodic testing, and readiness checks limit of Condition 4.1.1.a. The permittee shall record the length time and date that periodic testing, and readiness checks of the diesel fuel delivery system is conducted for each boiler (i.e. when the

boiler is operating on diesel for readiness checks) as allowed in Condition 4.1.1.a. of this permit. Such records shall be maintained in accordance with Condition 3.4.1.

4.2.4. For the purpose of demonstrating compliance with the hours of operation limit in Condition 4.1.2., the permittee shall record the number of hours each generator set is operated during the calendar month and the reason for such operation. Such records shall be maintained in accordance with Condition 3.4.1.
[40 CFR §60.4211(f)]

4.3. Testing Requirements

[Reserved]

4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.4.4. The permittee shall maintain the following records in accordance with Condition 3.4.1. of this permit:

a. The name of the diesel supplier;

b. A statement from the diesel supplier that the fuel complies with the specification under the definition of distillate oil in 40CFR§60.41c; and

c. Sulfur content or maximum sulfur content of the diesel supplied.
[40CFR§60.4848c(f)(1) and 45CSR§10-8.3.a.]

4.4.5. The permittee shall maintain records of all monitoring data required by Condition 4.2.2. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 - 10 mph NE wind) during the visual emission check(s). An example form is supplied as Appendix A. Should a visible emission observation be required to be performed per the requirements specified in METHOD 9, the data records of each observation shall be maintained per the requirements of METHOD 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent. Such records shall be maintained in accordance with Condition 3.4.1. of this permit.

4.5. Reporting Requirements

4.5.2. The permittee shall submit reports to the Director no later than the 30th day following the end of the reporting period. Such reports shall cover the six month period of January to June and July to December for the diesel fuel consumed by the Boilers 1, 2 3, and 4 to the facility during the reporting period. These reports shall include the records required in Condition 4.4.4. and a certified statement signed by the permittee that the records of fuel supplier certifications submitted represent all of the diesel combusted during the reporting period.
[40CFR§§60.48c(d), (e)(11), (f)(1) and (j)]

4.5.3. Any exceedance(s) of the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the exceedance(s), and any corrective measures taken or planned.

5.0. Source-Specific Requirements

[150 kW/230.3 bhp, Natural Gas-fired Emergency Generator Engine (E-Gen BRAC; BRAC)]

5.1. Limitations and Standards

5.1.1. The engine shall not exceed the following emission limits:

Pollutant	Maximum Emission Rate After Controls (Catalytic Muffler)		
	(g/HP-hr)	(lb/hr)	(tpy) (1)
NOx	0.57	0.29	0.07
CO	1.30	0.66	0.16

(1) Annual emission rate based on 500 hr/yr of operation.

5.1.2. **40 CFR 60, Subpart JJJJ Requirements.** The following conditions and requirements apply to the engine:

a. The permittee shall comply with the emission standards in Table 1 to this subpart for the engine. The emission standards are provided below:

Pollutant	Maximum Emission Rate		
	(g/HP-hr)	(lb/hr)	(tpy) (1)
NOx	2.0	1.02	0.25
CO	4.0	2.03	0.51
VOC (2)	1.0	0.51	0.13

(1) Annual emission rate based on 500 hr/yr of operation.
(2) Emissions of formaldehyde should not be included.

[40 CFR§60.4233(e)]

b. The permittee must install a non-resettable hour meter if the engine is not equipped with one.

[40 CFR§60.4237(b)]

c. To demonstrate compliance with the emission limits given in 5.1.2.a. (above):

- The engine must be certified by its manufacturer.
- The permittee must operate and maintain the certified engine and any control device in a certified manner to achieve the emission standards in section 5.1.2.a. (above) over the entire life of the engine. In a certified manner means operating and maintaining the engine according to the manufacturer's emission-related written instructions.

- The permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required.

- If the permittee makes adjustments to engine settings, the adjustments must be according to and consistent with the manufacturer's instructions and the engine will not be considered out of compliance.

[40 CFR§60.4243 (b) (1)]

d. The permittee shall operate the engine according to the requirements listed below:

(1) There is no time limit on the use of the above engine in emergency situations.

(2) The permittee may operate the above engine for any combination of purposes specified below for a maximum of 100 hours per calendar year.

(i) The above engine may be operated for maintenance checks and readiness testing provided that the tests are recommended by federal, state or local government or the manufacturer. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks or readiness testing, but a petition is not required if the permittee maintains records indicating the federal, state or local standards require maintenance and testing of the above engine beyond 100 hours per calendar year.

(3) The engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (2) of this section. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR§60.4243(d)]

5.2. Monitoring Requirements

5.2.1. For the purposes of demonstrating compliance with the maximum annual emission limits given in sections 5.1.1., 5.1.2.a. and the maximum operating hours given in section 5.1.2. d., the permittee shall:

a. Install, calibrate, maintain and operate equipment to monitor the hours of operation of the engine.

b. Monitor and record the monthly and rolling twelve-month total hours of operation for the engine.

5.3. Testing Requirements

[Reserved]

5.4. Recordkeeping Requirements

5.4.1. See section 5.1.2.c. (above).

5.5. Reporting Requirements

[Reserved]

Appendix A

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Date of Observation: _____

Data Entered by: _____

Reviewed by: _____

Date Reviewed: _____

Describe the General Weather Conditions:

Emission Point ID	Emission Point Description	Time of Observation	Visible Emissions? Yes/No	Consecutive Months of Visual Emissions	Comments

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.